What is Claimed Is:

1. An interface device for interfacing automatic test equipment (ATE) with a unit under test (UUT), the interface device comprising:

at least one GPI connector body carrying at least one floating GPI contact, the GPI contact having a first end and a second end, the first end of the GPI contact being adapted for engagement with a corresponding contact of the ATE in a manner to permit electrical communication between the GPI contact and its corresponding ATE contact;

at least one twin access contact (TAC) connector body carrying at least one floating TAC contact, the TAC contact having a first end and a second end, the TAC connector body being positioned adjacent to the GPI connector body so that the second end of the GPI contact engages the first end of the TAC contact in a manner to permit electrical communication between the GPI contact and the TAC contact; and

a printed wiring board (PWB) having at least one contact pad and at least one surface mount connector for mating with a UUT, the contact pad and the surface mount connector being electrically connected via circuitry carried by the PWB, the contact pad being adapted for engagement with the second end of the TAC contact in a manner to permit electrical communication between the contact pad and the TAC contact.

2. The interface device of claim 1 wherein the TAC contact comprises a first portion and a second portion between its first and second ends, the second portion being slidable axially relative to the first portion, the first and second portions being spring biased axially outwardly from one another so that the first and second ends of the TAC contact are correspondingly biased axially outwardly from one another.

3. The interface device of claim 2 wherein the first portion of the TAC contact comprises a generally cylindrical barrel and the second portion of the TAC contact comprises a first plunger which slides axially within barrel.

4. The interface device of claim 3 wherein the first plunger constitutes the first portion, the barrel constitutes the second portion, and wherein the TAC contact further comprises a second plunger which slides axially within barrel and substantially independently from the first plunger.

5. The interface device of claim 1 wherein the GPI contact extends generally along an axis between its first and second ends, and wherein the second end of the GPI contact includes a generally planar contact surface that is substantially perpendicular to said axis.

6. The interface device of claim 5 wherein the planar contact surface at the second end of the GPI contact is adapted for abutting engagement with the first end of the TAC contact in a manner to permit radially sliding movement of the GPI and TAC contacts relative to one another while maintaining electrical communication therebetween.

7. The interface device of claim 6 wherein the generally planar contact surface at the second end of the GPI contact has a diameter that is at least 75% of a diameter of the first end of the TAC contact.

8. The interface device of claim 1 wherein the at least one contact pad of the PWB has a generally planar contact surface, which is adapted for abutting engagement with the second end of the TAC contact in a manner to permit radially sliding movement of the TAC contact relative to the contact pad of the PWB while maintaining electrical communication therebetween.

9. The interface device of claim 1 wherein the GPI contact comprises one of a power contact, a signal contact and a coaxial contact.

10. The interface device of claim 1 wherein the TAC contact comprises one of a power contact, a signal contact and a coaxial contact.

11. The interface device of claim 1 wherein said at least one GPI connector body carries a plurality of floating GPI contacts, each of said GPI contacts having a first end and a second end, the first end of each GPI contact being adapted for engagement with a corresponding floating contact of the ATE in a manner to permit electrical communication between that GPI contact and its corresponding ATE contact, and wherein said at least one TAC connector body carries a plurality of floating TAC contacts, each of said TAC contacts having a first end and a second end, the TAC connector body being positioned adjacent to the GPI connector body so that the second end of each GPI contact engages the first end of a corresponding TAC contact in a manner to permit electrical communication between the GPI contact and its corresponding TAC contact.

12. The interface device of claim 11 further comprising a rigid, generally planar

plate positioned in parallel engagement with the PWB in a manner to reinforce the PWB and counter cumulative axial load generated by the PWB's engagement with the plurality TAC contacts.

13. The interface device of claim 1 wherein the ATE is a Consolidated Automated Support System (CASS) for testing defense equipment electronics systems.

14. An interface device for interfacing automatic test equipment (ATE) with a unit under test (UUT), the interface device comprising:

at least one GPI connector body carrying a plurality of floating GPI contacts, each of said GPI contacts having a first end and a second end, the first end of each GPI contact being adapted for engagement with a corresponding contact of the ATE in a manner to permit electrical communication between that GPI contact and its corresponding ATE contact;

at least one twin access contact (TAC) connector body carrying a plurality of floating TAC contacts, each of said TAC contacts having a first end and a second end, the TAC connector body being positioned adjacent to the GPI connector body so that the second end of each GPI contact engages the first end of a corresponding TAC contact in a manner to permit electrical communication between the GPI contact and its corresponding TAC contact; and

a printed wiring board (PWB) having a plurality of contact pads and at least one surface mount connector for mating with a UUT, the surface mount connector and at least some of the contact pads being electrically connected via circuitry carried by the PWB, each of said contact pads being adapted for engagement with the second end of a

corresponding TAC contact in a manner to permit electrical communication between the contact pad and its corresponding TAC contact.

15. The interface device of claim 14 wherein each TAC contact comprises a generally cylindrical barrel, a first plunger at the first end of the TAC contact which slides axially within one end of the barrel, and a second plunger at the second end of the TAC contact which slides axially within an opposite end of the barrel and substantially independently from the first plunger, wherein the first and second plungers are spring biased axially outwardly from one another so that the first and second ends of the TAC contact are correspondingly biased axially outwardly from one another.

16. The interface device of claim 14 wherein each GPI contact extends generally along an axis between its first and second ends, and wherein the second end of each GPI contact includes a generally planar contact surface that is substantially perpendicular to said axis, said planar contact surface being adapted for abutting engagement with the first end of the corresponding TAC contact in a manner to permit radially sliding movement of the GPI and TAC contacts relative to one another while maintaining electrical communication therebetween.

17. The interface device of claim 14 further comprising a rigid, generally planar plate positioned in parallel engagement with the PWB in a manner to reinforce the PWB and counter cumulative axial load generated by the PWB's engagement with the plurality TAC contacts.

18. The interface device of claim 14 wherein the ATE is a Consolidated Automated Support System (CASS) for testing defense equipment electronics systems.

19. A connector assembly for an interface device that a interfaces automatic test equipment (ATE) with a unit under test (UUT), the connector assembly comprising:

a GPI connector body having a plurality of holes, each of said holes being sized to receive a GPI contact in a manner that permits limited axial and radial float of said GPI contact relative to the GPI connector body;

a twin access contact (TAC) connector body having a plurality of holes, each of said holes being sized to receive a TAC contact in a manner that permits limited axial and radial float of said TAC contact relative to the TAC connector body, the TAC connector body being connected to the GPI connector body in a manner so that each GPI contact engages a corresponding TAC contact in a manner to permit electrical communication between the GPI contact and its corresponding TAC contact.

20. The connector assembly of claim 19 wherein each GPI contact has a first end and a second end and extends generally along an axis between its first and second ends, and wherein one of the first and second ends of each GPI contact includes a generally planar contact surface that is substantially perpendicular to said axis.

21. The connector assembly of claim 20 wherein the planar contact surface of each GPI contact is adapted for abutting engagement with an end portion of the corresponding the TAC contact in a manner to permit radially sliding movement of the GPI and TAC contacts relative to one another while maintaining electrical communication

therebetween.

22. The connector assembly of claim 21 wherein the generally planar contact surface of each GPI contact has a diameter that is at least 75% of a diameter of the end portion of the corresponding TAC contact.

23. The connector assembly of claim 19 wherein each GPI contact comprises one of a power contact, a signal contact and a coaxial contact.

24. The connector assembly of claim 19 wherein each TAC contact comprises one of a power contact, a signal contact and a coaxial contact.